Manitoba
Agriculture

1988
Field Crop Variety Recommendations for Manitoba

This annual publication is for use with the 1988-90 Field Crop Production Guide

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1988
VARIETY RECOMMENDATIONS FOR MANITOBA

FIELD CROP VARIETY RECOMMENDATIONS FOR MANITOBA
Prepared by
Manitoba Agriculture in cooperation with Agricultural Research Personnel in Industry, University of Manitoba and Agriculture Canada.

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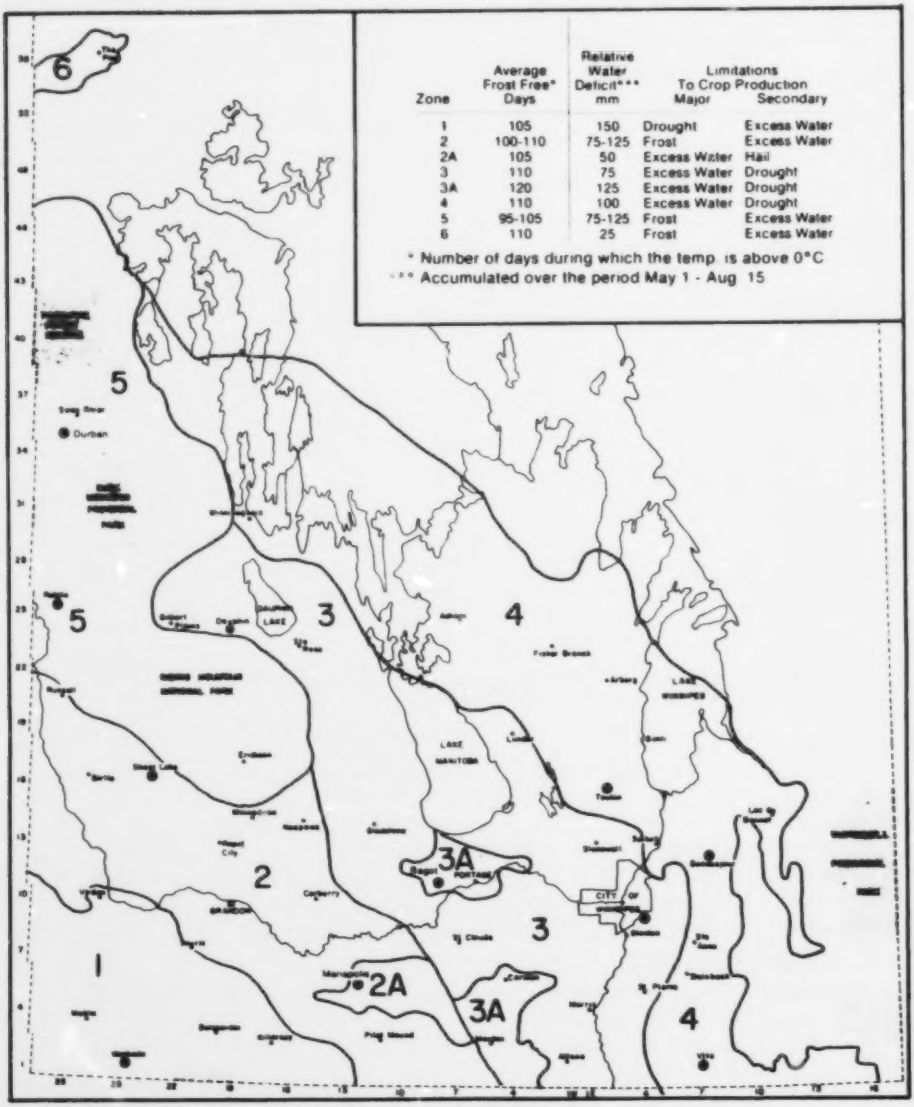
CROP INSURANCE

Except for grain corn, safflower, spring rye and forage crops, all varieties recommended in this publication are insurable under the Canada-Manitoba Crop Insurance Program. For information on the insurability of varieties not recommended in this publication, please contact your nearest Crop Insurance office.

USE OF GOOD SEED

Always use good, preferably pedigreed, seed of a recommended variety. Pedigreed seed is produced under the rules and regulations of the Canadian Seed Growers' Association. It has varietal purity, and must meet the high level of quality and cleanliness required in pedigreed seed grades. In field trials, certified seed has consistently outyielded seed derived from non-pedigreed sources.

CROP VARIETY ZONE MAP FOR MANITOBA



Zone	Average Frost Free* Days	Relative Water Deficit*** mm	Limitations To Crop Production Major	Secondary
1	105	150	Drought	Excess Water
2	100-110	75-125	Frost	Excess Water
2A	105	50	Excess Water	Hail
3	110	75	Excess Water	Drought
3A	120	125	Excess Water	Drought
4	110	100	Excess Water	Drought
5	95-105	75-125	Frost	Excess Water
6	110	25	Frost	Excess Water

* Number of days during which the temp is above 0°C

*** Accumulated over the period May 1 - Aug 15

● CROP VARIETY ADAPTATION TRIALS

CEREAL CROPS

BARLEY

• Recommended Varieties

For Malting or Feed

Argyle (blue aleurone) — all zones — 6-row
Bonanza (blue aleurone) — all zones — 6-row
Conquest (blue aleurone) — all zones — 6-row
Ellice (yellow aleurone) — all zones — 2-row

For Feed (yellow aleurone)

Bedford — all zones — 6-row	
Deuce — all zones — 2-row	*See Comments*
Duke (semi-dwarf) — all zones — 6-row	*See Comments*
Heartland — all zones — 6-row	
Leduc — zones 1 & 2 — 6-row	*See Comments*
Norbert — all zones — 2-row	*See Comments*
Tupper — all zones — 6-row hulless	*See Comments*
Virden — all zones — 6-row	*See Comments*

Comments

- **Virden:** A new six row feed variety with very high yield potential. It responds best under high moisture conditions, but will maintain relatively high yields under low moisture stress. Virden has excellent lodging resistance and is the only registered variety that is resistant to common root rot. It matures relatively late, and should be sown early in the season to avoid frost damage. In other characteristics, Virden is similar to Bedford. Certified seed will not be available in 1988.
- **Leduc:** Not recommended for areas where lodging is a serious problem.
- **Duke:** A new semi-dwarf feed variety that is intended primarily for high management crop conditions, where high moisture coupled with high fertility will produce severe lodging with conventional varieties. Duke has a yield response similar to Bedford under conventional management practices, with the added benefit of better lodging resistance. Duke requires a higher level of weed control than conventional feed barley because it is less competitive with weeds. Certified seed of Duke will not be available in 1988.
- **Norbert:** Increase seed rate of this variety by 25% to compensate for large kernel. Crop may be sensitive to Hoe-Grass and Hoe-Grass II; for herbicide recommendations, see the 1988 Guide to Chemical Weed Control.

  Norbert may not be recommended in 1989.

- **Tupper:** A hulless six-row feed variety for use as a high-energy feed. It can be substituted for feed wheat, particularly where climate limits wheat production. Tupper yielded 117% of Neepawa and equal to HY 320 province-wide from 1982 to 1985. Tupper is acceptable for on-board marketing.
- **Deuce:** A new two-row feed variety that is comparable in yield with Bonanza. Deuce is equal in agronomic performance to Norbert with the added benefit of stronger straw. Deuce is not eligible for the malting grades. Certified seed will be available in 1988.

• Barley Variety Descriptions

Variety	Yield as % of Bonanza*	Years Tested	Days to Maturity	Height cm	Height (in.)	Bulk Density kg/m³	Bulk Density (lb/bu)	Resistance to: Lodging	Stem Rust	Loose Smut	Surface Borne Smuts	Root Rot	Net Blotch
Argyle	101	5	86	91	(37)	625	(48.5)	good	good	poor	poor	fair	fair
Bonanza	100	5	85	89	(36)	636	(49.4)	fair	good	poor	poor	fair	fair
Conquest	96	5	84	89	(36)	631	(49.0)	fair	good	poor	fair	fair	fair
Ellice	92	5	87	79	(32)	650	(50.5)	good	good	poor	poor	fair	fair
Bedford	107	5	87	79	(32)	659	(51.2)	excel.	good	poor	fair	fair	fair
Deuce	97	2	87	79	(32)	668	(51.9)	excel.	good	poor	good	fair	poor
Duke (semi-dwarf)	107	1	89	67	(24)	640	(49.7)	excel.	good	poor	fair	fair	fair
Heartland	110	5	87	72	(30)	638	(49.6)	good	good	poor	poor	fair	fair
Leduc	107	5	89	79	(32)	634	(49.2)	fair	good	fair	good	fair	fair
Norbert	97	5	87	79	(32)	671	(52.1)	good	good	poor	poor	fair	fair
Tupper	88	5	85	87	(35)	700	(54.4)	fair	fair	fair	poor	fair	poor
Virden	114	2	90	81	(33)	627	(48.7)	excel.	good	poor	fair	good	fair

Average yield of Bonanza (1982-87) is 3977 kg/ha (99 bu/ac).

• Yields by Crop Variety Zone (per cent)

Variety	Years Tested	Zone 1 & 2*	3	4	5	6**
Argyle	5	100	102	104	100	94
Bonanza	5	100	100	100	100	100
Conquest	4	89	102	92	93	98
Ellice	3	92	98	93	88	91
Bedford	5	105	109	109	101	112
Deuce	2	101	95	104	93	109
Duke (semi-dwarf)	1	104	106	115	118	103
Heartland	5	110	112	109	102	123
Leduc	5	107	110	105	104	128
Norbert	5	97	100	99	87	102
Tupper	4	86	92	87	89	106
Virden	2	122	109	117	105	146

Zone 1 & 2 data combined due to insufficient test sites in Zone 1.
**No data available for 1987 in this Zone.*

OATS

• Recommended Varieties

Dumont — all zones

Fidler — all zones

Riel — all zones

Comments

Dumont and Fidler have white coloured hulls: Riel has a tan coloured hull. Both Dumont and Riel have high test weight and other kernel characteristics that make these varieties acceptable to the milling trade ("designated oats") and as "race horse" oats.

• Oats Variety Descriptions

Variety	Yield as % of Dumont	Years Tested	Days to Maturity	Height cm	Height (in.)	% Hull	Test Weight kg/m³	Test Weight (lb/bu)	Resistance to Lodging	Resistance to Stem Rust	Resistance to Leaf Rust	Resistance to Smut
Dumont	100*	5	94	102	(40)	23.8	493	(39.5)	Fair	Good	Good	Good
Fidler	95	5	92	98	(39)	24.6	474	(38.0)	Good	Good	Good	Good
Riel	97	4	94	103	(41)	21.4	505	(40.5)	Good	Good	Good	Good

**Average yield 4110 kg/ha (108 bu/ac) in Manitoba trials (1983-87).*

Yields by Crop Variety Zone (per cent)

Variety	Years Tested	Zone 1 & 2*	Zone 3	Zone 4	Zone 5	Zone 6**
Dumont	5	100	100	100	100	100
Fidler	5	95	97	91	99	109
Riel	4	96	94	97	103	93

**Zone 1 & 2 data combined due to insufficient test sites in Zone 1.*

***Based on 4 years of testing for Dumont and Fidler, and 3 years of testing for Riel.*

RYE

• Recommended Varieties

Fall Rye

Musketeer — all zones

Prima — all zones

Spring Rye

Gazelle — all zones

• Rye Variety Descriptions

Variety	Yield as % of Musketeer*	Years Tested	Order of Maturity	Winter Survival	Resistance to: Lodging	Shattering	Ergot
Fall Varieties							
Musketeer	100	5	1	Very good	Good	Good	Poor
Prima	95	2	2	Very good	Fair	Good	Poor
Spring Variety							
Gazelle	67	5	—	—	Fair	Good	Poor

*Average yield of Musketeer 4152 kg/ha (1983-87).

TRITICALE

Three varieties: Carman, Welsh and Wapiti are recommended for production in Manitoba. All varieties are late maturing and have good to fair resistance to lodging, stem and leaf rust and loose smut. Yield and protein content are similar to Glenlea wheat.

Triticale is used in Canada both as a food and as a livestock feed.

Note

Wapiti (T44) is a new variety developed at the Alberta Field Crops Branch, Lacombe, Alberta. Wapiti outyields Carman and Welsh, provides a greater resistance to common root rot, and shows potential for silage production. Seed of Wapiti will not be available in 1988.

WHEAT

• Recommended Varieties

Eligible for Canada Western Red Spring grades

Benito — all zones	*See Comments*
Columbus — all zones	
Katepwa — all zones	*See Comments*
Kenyon — all zones	*See Comments*
Neepawa — all zones	*See Comments*
Roblin — all zones	

Eligible for Canada Prairie Spring (red) grades

HY 320 (semi-dwarf) — all zones	
Oslo (semi-dwarf) — all zones	*See Comments*

Eligible for Canada Utility grades

Glenlea — all zones

Eligible for Canada Western Amber Durum grades
Arcola — all zones
Coulter — all zones
Medora — all zones
Sceptre — all zones

Comments

Benito may be removed from the recommended list for 1989.

Katepwa has slightly more leaf rust resistance than Neepawa, but will also suffer yield losses in a leaf rust epidemic year.

Kenyon is a recently-released variety with good rust resistance. It is similar to Katepwa in yield, maturity and height. Limited Certified seed will be available through SeCan for 1988.

Neepawa is fairly susceptible to leaf rust and will suffer some yield loss in a year when leaf rust attacks early and severely. It may be removed from the recommended list for 1989.

Oslo is an early-maturing semi-dwarf wheat for the CPS class with lower yielding capacity than HY 320. Seed is available through Manitoba Pool for 1988.

Coulter may be removed from the recommended list for 1989.

Note
Fielder is a soft white spring wheat usually grown under irrigation. It is **not** recommended in Manitoba. It is susceptible to stem rust and the smuts.

• Wheat Variety Descriptions

Variety	Yield as % of Neepawa	Years Tested	Days to Maturity	Seed Size	Height	Resistance to: Lodging	Stem Rust	Leaf Rust	Loose Smut	Bunt
Benito	97	5	97	Small	Medium	Fair-Good	Good	Good	Good	Fair
Columbus	96	5	100	Medium	Medium+	Good	Good	Good	Fair	Good
Katepwa	102	5	97	Medium	Medium	Good	Good	Fair	Good	Good
Kenyon	101	1	97	Medium	Medium	Good	Good	Good	Good	Fair
Neepawa	100*	5	97	Medium	Medium	Good	Good	Poor	Good	Fair
Roblin	106	2	95	Medium+	Medium–	Excellent	Good	Good	Good	Fair
HY 320	119	5	103	Medium+	Semidw	Excellent	Good**	Good	Poor	V.Poor
Oslo	114	2	98	Medium+	Semidw	Excellent	Good	Good	Poor	Fair
Glenlea	110	5	102	Large	Medium+	Good	Good	Good	Good	Fair
Arcola	118	5	99	Large+	Medium	Fair	Good	V.Good	Fair	Good
Coulter	115	5	99	Large	Medium	Fair	Good	V.Good	Fair	Good
Medora	120	5	100	Large	Medium+	Fair-Good	Good	V.Good	Fair	Good
Sceptre	122	3	100	Large	Medium–	Good	Good	V.Good	Fair	Good

**Average Neepawa yield: 2837 kg/ha (42 bu/ac), (1983-87).*

***Stem rust will develop on late planted HY 320 when inoculum is abundant.*

• Yields by Crop Variety Zone (per cent)

Variety	Years Tested	1 & 2*	3	4	5	6**
Benito	5	96	98	99	93	99
Columbus	5	99	94	98	95	87
Katepwa	5	99	105	102	104	98
Kenyon	1	100	98	98	107	—
Neepawa	5	100	100	100	100	100
Roblin	2	103	104	109	116	120
HY 320	5	121	120	110	129	117
Oslo	2	110	112	118	120	121
Glenlea	5	108	107	118	118	103
Arcola	5	113	116	118	124	96
Coulter	5	114	112	113	117	89
Medora	5	115	119	123	120	92
Sceptre	3	118	125	113	122	83

*Zone 1 & 2 data combined due to insufficient test sites in Zone 1.

**Three years' data: 1984 to 1986.

WINTER WHEAT

All registered varieties lack sufficient hardiness for conventional production in Manitoba. Direct planting into stubble provides a snow trap that improves winter survival. Currently licensed varieties are very susceptible to leaf and stem rust. Norstar is the hardiest variety available and yielded 126% of the spring wheat check variety Neepawa in Manitoba trials over 5 years (1983-87).

NorWin, a semi-dwarf variety inferior to Norstar in winter survival and yield, should **not** be grown in Manitoba.

OILSEEDS AND SPECIAL CROPS

BUCKWHEAT

• Recommended Varieties

Large Seeded
Mancan — all zones
Manor — all zones

Small Seeded
Tokyo — all zones

• Buckwheat Variety Descriptions

Variety	Yield as % of Tokyo	Years Tested	Days to 100% Bloom	Height		Seed Weight g/1000
				cm	(in.)	
Mancan	103	5	45	122	(48)	28.8
Manor	107	5	44	117	(46)	28.9
Tokyo	100*	5	44	120	(47)	22.9

**Average yield: 1742 kg/ha (1554 lb/acre) in Manitoba trials (1983-87).*

CANARYSEED

• Recommended Variety

Keet — all zones

• Canaryseed Variety Description

Variety	Yield kg/ha (lb./ac)	Years Tested	Days to Maturity	Height		Seed Weight g/1000
				cm	(in.)	
Keet	1902* (1698)	5	96	77	(30.3)	7.2

**Average yield in Manitoba trials (1983-87).*

CANOLA-RAPESEED

• Recommended Varieties — Canola Type
(all low erucic, low glucosinolate)

Argentine type (Brassica napus)
Global — zones 1, 2, 2A, 3 & 3A
Regent — all zones
Stellar — all zones
Westar — all zones

Triazine tolerant varieties
OAC Triton — all zones
Tribute — all zones

Polish type (Brassica campestris)
Candle — all zones
Tobin — all zones

Comments
The Western Canadian oilseed crushing industry now processes only seed from canola (low erucic, low glucosinolate) varieties. Other countries are also developing a preference for canola. It is recommended that producers use only Certified seed of the recommended canola varieties to assure acceptability of their product.

Limited production of high erucic acid rapeseed varieties for industrial markets is continuing. These varieties are grown on a contract basis only.

Candle may be dropped from the recommended list in 1989.

Global is a spring canola variety, tested as SV02279 and developed by Svalof AB, Sweden. It is higher yielding, but later in maturity and has a higher percentage of green seeds than the check varieties. It is recommended for the southern areas of Manitoba because of late maturity and potential green seed problems. Certified seed of Global is available from Manitoba Pool Elevators, Seeds and Special Crops Division.

Stellar is the first canola quality cultivar that produces a seed oil with low levels of linolenic acid and high levels of linoleic acid. This oil has advantages to the processor and to the consumer in its improved stability. Stellar was developed from a cross between a low linolenic selection and the canola cultivar Regent at the University of Manitoba. It is lower yielding and later in maturity than Westar. Stellar showed significantly better resistance to blackleg than Westar under conditions of heavy blackleg infestation. There has been a restricted release of Stellar to the western Canadian crushing industry.

• Canola Variety Description

Species and Variety	Yield as % of Westar	Years Tested	Days to Maturity	Height		Seed Oil (%)	Meal Protein (%)	Resistance to	
				cm	(in.)			White Rust/ Staghead	Blackleg
Argentine (B. napus)									
Global	114	1	105	132	(52)	42.2	42.7	good	poor
Regent	91	5	96	111	(44)	43.1	46.1	good	poor
Stellar	82	1	96	110	(43)	43.0	46.0	good	fair
Westar	100*	5	93	109	(43)	43.8	44.2	good	poor
Triazine tolerant varieties									
OAC Triton	74	5	96	108	(43)	40.5	46.4	good	poor
Tribute	68	2	95	100	(39)	40.6	46.3	good	poor
Polish (B. campestris)									
Candle	74	5	84	99	(39)	41.4	42.9	fair	poor
Tobin	77	5	84	99	(39)	42.2	43.2	good	poor

**Average yield: 2492 kg/ha (2223 lb./acre) in Manitoba trials (1983-87).*

• Yields by Crop Variety Zone (per cent)

Species and Variety	Years Tested	Zone					
		1	2	3	4	5	6
Argentine (B. napus)							
Global	1	106	116	111	110	132	—
Regent	5	102	96	88	96	79	67
Stellar	1	74	94	80	79	89	—
Westar*	5	100	100	100	100	100	100
Triazine tolerant varieties							
OAC Triton	5	74	78	74	76	68	55
Tribute	2	66	73	66	69	62	—
Polish (B. campestris)							
Candle	5	85	66	81	74	73	64
Tobin	5	91	58	82	79	69	71
***Westar Check**							
kg/ha		2576	2487	2514	2188	2595	2830
lb./acre		2298	2219	2243	1952	2315	2525

FABABEANS

• Recommended Varieties

Ackerperle — all zones
Aladin — all zones
Herz Freya — all zones
Outlook — all zones
Pegasus — all zones

• Fababean Variety Descriptions

Variety	Yield as % of Pegasus	Years Tested	Seed Wt. g/1000	Days to Maturity	Protein Content %
Ackerperle	97	4	338	107	29.6
Aladin	101	4	393	106	29.8
Herz Freya	101	5	370	102	28.6
Outlook	102	4	345	105	29.6
Pegasus	100*	5	359	105	29.7

**Average yield: 4796 kg/ha (4278 lb./acre) in Manitoba trials (1983-87).*

FIELD BEANS

• Recommended Varieties

Variety	Type	
Loop	Black	South of Township 14. Zones 1, 2, 2A, 3 & 3A and that portion of Zone 4 with a minimum corn heat unit accumulation of approximately 2400.
Seafarer	Navy	
OAC Seaforth	Navy	

• Field Bean Variety Descriptions

Type	Variety	Yield as % of Seafarer	Years Tested	Seed Wt. g/1000	Days to Maturity	Plant Height cm	Plant Height (in.)
Black	Loop	128	2	190	111	60	(24)
Navy	OAC Seaforth	98	2	193	98	48	(19)
Navy	Seafarer	100*	2	194	98	44	(19)

*Average yield: 3269 kg/ha (2916 lb./acre) in Manitoba trials (1986-87).

FIELD PEAS

• Recommended Varieties

Yellow Peas

Century — all zones — medium-seeded
Titan — all zones — large-seeded
Tara — all zones — medium-seeded
Tipu — all zones — medium-seeded, semi-leafless
Victoria — all zones — medium-seeded
Trapper — all zones — small-seeded

Green Peas

Triumph — all zones — large-seeded

• Field Pea Variety Descriptions

Variety	Yield as % of Century	Years Tested	Days to Mature	Length of Vine cm	Length of Vine (in.)	Seed Wt. g/1000	Protein %
Century	100*	2	96	120	(47)	226	23.9
Titan	107	2	96	119	(47)	250	23.1
Tara	109	1	97	108	(43)	199	23.1
Tipu	99	2	96	120	(47)	218	22.8
Victoria	115	2	90	96	(38)	185	23.9
Trapper	94	1	95	107	(42)	139	24.4
Triumph	110	2	99	82	(32)	289	24.0

*Average yield: 2485 kg/ha (2257 lb./acre) in Manitoba trials (1986-87).

• Yield by Crop Variety Zone (per cent)

Variety		Years Tested	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Century*		2	100	100	100	100	100
Titan		2	95	114	105	108	112
Tara**		2	93	115	105	119	139
Tipu		2	92	108	91	103	103
Trapper**		2	85	109	88	100	102
Triumph		2	113	129	94	112	96
Victoria		2	109	113	116	106	141
*Century	kg/ha		2719	2900	2196	2811	2015
	lb./acre		2425	2587	1959	2507	1797

**One year data only (1987).

FLAX

• Recommended Varieties

Dufferin — all zones
Linott — all zones
McGregor — all zones
NorLin — all zones
NorMan — all zones

Comments

Plant are varieties early for maximum yield particularly Dufferin and McGregor. In northern areas use the earlier Linott, NorLin or NorMan. When seeding is delayed Linott and NorLin will give the best results.

• Flax Variety Descriptions

Variety	Yield as % of Dufferin	Days to Maturity	Height cm	Height (in.)	Resistance to Lodging	Seed Wt. g/1000	% Oil Content	Oil** Quality	Reaction to: Rust	Reaction to: Wilt
Dufferin	100*	99	64	(25)	fair	5.7	44.1	182	Res.	Mod. Res.
Linott	91	92	57	(22)	fair-good	5.5	42.7	182	Res.	Mod. Res.
McGregor	103	100	62	(24)	good	5.3	43.0	184	Res.	Mod. Res.
NorLin	99	95	60	(24)	fair-good	5.7	42.5	181	Res.	Mod. Res.
NorMan	102	97	59	(23)	fair-good	5.8	43.8	177	Res.	Mod. Res.

Average yield: 1773 kg/ha (1582 lb./acre) in Manitoba trials (1983-87).

***Drying property measured in iodine units.*

• Yields by Crop Variety Zone (per cent)

Zone	1	2	3	4	5	6
Years Tested →	5	5	5	5	5	1
Variety						
Dufferin*	100	100	100	100	100	100
Linott	90	86	92	91	91	111
McGregor	103	103	103	101	101	103
NorLin	100	98	98	105	98	98
NorMan	95	103	102	105	102	101
*Dufferin						
kg/ha	1787	1673	1883	1592	1898	1365
lb./acre	1594	1492	1680	1420	1693	1218

LENTILS

• Recommended Varieties

Eston — all zones
Laird — all zones

• Lentil Variety Descriptions

Type	Variety	Years Tested	Yield as % of Laird	Days to Mature	Seed Weight g/1000	Plant Height cm	Plant Height (in.)
Persian	Eston	5	117	95	36	40	(16)
Chilean	Laird	5	100*	103	68	53	(21)

Average yield: 1618 kg/ha (1443 lb./acre) in Manitoba trials (1983-87).

• Yields by Crop Variety Zone (per cent)

Zone		1	2	3	5
Years Tested →		4	5	5	4
Variety					
Eston		107	98	137	107
Laird		100	100	100	100
*Laird	kg/ha	1816	2000	1435	1388
	lb./acre	1620	1784	1270	1238

MUSTARD

• Recommended Varieties

Yellow
Gisilba — all zones
Kirby — all zones
Ochre — all zones
Tilney — all zones

Oriental
Cutlass — all zones
Domo — all zones
Lethbridge 22A — all zones

Brown
Scimitar — all zones

Comments
Scimitar is the first brown mustard variety with resistance to white rust. It was developed at Agriculture Canada, Saskatoon from a cross between the brown mustard variety Blaze and a single plant selection from an Oriental mustard with resistance to white rust. Seed yield is similar to that of Commercial Brown. The seeds contain high levels of allyl isothiocyanate and slightly higher oil than standard brown mustard varieties. Seed will be distributed through the Mustard Association.

• Mustard Variety Descriptions

Type	Variety	Years Tested	Yield as % of Gisilba	Days to Maturity	Height cm	Height (in.)	Oil %
Yellow	Gisilba	5	100*	93	116	(46)	26.9
Yellow	Kirby	5	103	93	117	(46)	27.5
Yellow	Ochre	4	100	93	116	(46)	27.1
Yellow	Tilney	4	102	93	118	(46)	26.7
Oriental	Cutlass	3	129	90	130	(51)	37.6
Oriental	Domo	5	134	90	129	(51)	38.4
Oriental	Leth 22A	5	114	90	126	(50)	37.8
Brown	Scimitar	2	115	93	136	(54)	35.8

**Average yield: 1936 kg/ha (1727 lb/acre) in Manitoba trials (1983-87).*

• Yields by Crop Variety Zone (per cent)

Variety	Years Tested	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Gisilba*	5	100	100	100	100	100
Kirby	5	110	162	102	99	100
Ochre	4	107	113	97	98	100
Tilney	4	102	139	102	99	92
Cutlass	3	141	162	117	140	112
Domo	5	146	—	130	148	115
Leth 22A	5	122	146	107	129	96
Scimitar	2	118	169	107	134	93
*Gisilba check						
kg/ha		2048	2021	2008	1574	1844
lb./acre		1827	1803	1791	1404	1645

Zone 6 is not included due to lack of test sites.

POTATOES

• Recommended Varieties

Early Crop
Red: Norland
White: Carlton
Conestoga

Storage
Red: Norland, Red Pontiac
White: Norchip, Monona, Kennebec, Shepody
Russet: Russet Burbank, Norgold Russet
Yellow Flesh: Yukon Gold

• Potato Variety Descriptions

- **Carlton:** An early maturing variety with white-skinned, oval, shallow-eyed tubers that size as early as Warba. Boiling quality is similar to Warba.
- **Conestoga:** A good-yielding, early maturing variety with white-skinned, round, shallow-eyed and high specific gravity tubers. It is suitable for early chipping and early table stock sales but is somewhat susceptible to hollow heart.
- **Norland:** A good yielding early maturing variety with red-skinned, shallow-eyed tubers suited for early harvest and storage until mid-winter.

- **Kennebec:** A very late maturing high yielding variety with white-skinned, shallow-eyed tubers suitable for chipping. It is susceptible to greening.
- **Monona:** A medium to high-yielding variety of mid-season maturity with white-skinned, oblong, shallow-eyed tubers of medium to low specific gravity that are suitable for chipping. Chips of acceptable quality can be produced after long-term storage.
- **Norchip:** A good yielding, medium maturing variety with white-skinned, high-specific-gravity tubers. It has acceptable chipping characteristics and a short dormancy period.
- **Norgold Russet:** A good-yielding variety of medium maturity with oblong to long uniform tubers with short dormancy period. Cooking quality is suited to baking and table stock sales but the percentage of grade-out resulting from hollow heart can be very high making the potatoes unsaleable without the aid of mechanical hollow heart sorting equipment.
- **Red Pontiac:** A high yielding drought tolerant variety with red-skinned, medium deep-eyed tubers of low dry matter content. Suitable for table stock use.
- **Russet Burbank:** A high quality, late maturing variety with russet-skinned, long, shallow-eyed tubers suitable for processing (other than chips), baking and table stock use. Its tuber shape can be extremely variable if plants are subject to stress during the tuber enlargement period of growth.
- **Shepody:** A high quality, late mid-season maturing variety with large, white-skinned, oblong-to-elliptical tubers. Yield, specific gravity and french fry color are similar to Russet Burbank. First harvest for processing is expected to be acceptable at a minimum of 5 to 7 days earlier that Russet Burbank.
- **Yukon Gold:** A medium-yielding, medium maturing, yellow-fleshed variety with high specific gravity and shallow-eyed tubers with acceptable table stock cooking quality. The percentage of hollow heart can frequently exceed the Canada grade tolerance levels.

SAFFLOWER

• Recommended Variety

Saffire

• Safflower Variety Description

Variety	Yield* kg/ha (lb./ac)	Years Tested	Days to Maturity	Height cm	Height (in.)	Seed Wt. g/1000	Reaction to Sclerotinia Head Rot	Reaction to Alternaria Leaf Spot
Saffire	1154 (1029)	4	119	48	(19)	32.5	Mod. Resis.	Mod. Resis.

*Average yield in Manitoba trials, 1984-87.

SOYBEANS

• Recommended Varieties

Variety	Maturity Group	Minimum Corn Heat Unit Requirement
Baron	000	2450
KG 20	00	2400
Maple Amber	000	2300
Maple Ridge	000	2300
McCall	00	2500

Comments

Soybeans are placed into maturity groups based on their photoperiod sensitivity. 00 maturity group soybeans are the earliest maturing photoperiod sensitive soybeans, adapted for production in the 45 to 50 degree latitude range. 000 maturity group soybeans are very early maturing photoperiod insensitive soybeans adapted for production at high latitudes.

• Variety Description

Variety	Yield as % of Maple Amber	Years Tested	Seed Weight g/1000	Days to Maturity		Protein Content	Oil Content	Height	
				Average	Range	%	%	cm	(in.)
Baron	104	4	156	109	100-124	40.7	20.7	71	(28)
KG 20	109	5	175	108	100-126	40.8	19.1	74	(29)
Maple Amber	100*	5	151	113	101-130	41.0	21.3	75	(30)
Maple Ridge	103	5	139	107	98-118	41.5	19.6	65	(26)
McCall	100	5	144	114	106-134	39.7	20.0	78	(31)

**Average yield 1983-87: 2677 kg/ha (2388 lb /ac)*

SUGAR BEETS

This crop is grown under contract with Manitoba Sugar Company and seed is provided under the contract.

SUNFLOWERS

• Recommended Hybrids

All sunflower hybrids listed in the variety description table are recommended in Zones 1 and 2 (south of Township 18), and Zones 2A, 3, 3A and 4 (south of Township 19).

• Sunflower Hybrid Descriptions

Hybrid Oil Type	Yield as % of 3 checks**	Years tested	Days to Maturity	% Oil (10% Moisture)	Resistance to		
					Rust	Verticillium Wilt	Downy Mildew***
Car. 205	95	5	118	41.9	Fair-poor	Good	Fair
Car. 206	96	5	121	40.3	Fair-poor	Good	Fair
Car. 207	111	5	119	38.3	Good	Good	Poor
Car. SF 102	94	5	120	40.7	Fair-poor	Good	Fair
Car. SF 103	105	4	119	39.0	Good	Good	Poor
Challenger	102	4	118	41.7	Fair-poor	Good	Good
Dakota Gold II*	94	3	117	44.0	Fair-poor	Good	Fair-poor
DO 164	94	5	116	40.1	Good	Good	Good
DO 844	97	3	118	39.7	Good	Good	Good
DO 855	93	4	118	41.5	Good	Good	Good
IS 3001	96	4	118	42.6	Fair-poor	Good	Fair
IS 3312	94	4	117	43.9	Fair-poor	Good	Good
IS 7000	94	5	115	42.4	Good	Good	Fair-poor
7101 (IS)	94	5	116	40.6	Fair-poor	Good	Good
IS 7111	98	5	116	42.9	Fair-poor	Fair	Fair-poor
IS 8101*	101	3	119	42.5	Fair-poor	Good	Fair
S1283 (Stauffer)	94	4	110	43.0	Fair-poor	Fair-poor	Fair
S1296 (Stauffer)*	106	3	116	42.5	Fair-poor	Fair-poor	Good
S1888 (Stauffer)	95	5	118	40.7	Fair-poor	Good	Good
S316 (SeedTec)	94	5	120	40.8	Fair-poor	Good	Fair
SigCo 450	94	5	119	40.7	Fair-poor	Good	Fair
SigCo 452*	101	3	119	42.1	Fair-poor	Good	Good
Sun M20	87	5	109	42.2	Fair-poor	Fair-poor	Poor
Sun S600*	104	3	116	41.7	Good	Good	Fair
Sunbred 265	98	5	119	41.2	Good	Good	Good
Non-oilseed Type				**Seed Size % over 20/64**			
D131	106	5	118	28	Good	Fair	Poor
D141*	107	3	118	37	Good	Fair	Poor
IS 8004*	110	3	117	47	Good	Fair-poor	Poor
Royal Hyb. 2141	107	5	116	21	Good	Good	Poor
SigCo 954	103	5	117	47	Good	Good	Poor
SigCo 964	111	4	113	34	Good	Fair-poor	Poor

*On recommended list for first time

**Mean of hybrids Cargill 205, Cargill 207 and 7101 (IS). Average yield, 1983-87, all Manitoba: 2437 kg/ha (2174 lb./acre)

***Reactions indicated are those to race 2 of the downy mildew pathogen. However, hybrids are all highly susceptible to race 3, currently well established in Manitoba

Lodging resistance data available in the **Manitoba Regional Sunflower Performance Tests Report.**

Heat Unit Rating**	Brand and/or Hybrid Name	Hybrid Type[1]	Days to Silk	Stalk Break (%)	Root Lodg. (%)	Grain Density (% of mean)[2]	Grain Moisture (%)	Grain Yield (% of mean)[3]	Silage Yield (% of mean)[4]	Plant Moisture (%)
2150	Dekalb DK 233*	SC	71	5.2	1.1	104	34.0	95	—	—
	Limagrain LG3	3W	71	2.8	8.1	102	33.7	99	79	63.1
	Pickseed 2435	3W	73	4.5	10.8	102	30.6	95	81	59.1
	Pickseed 2468	3W	72	8.4	5.1	100	30.1	86	76	59.2
	Pioneer 3995	3W	71	5.4	3.3	102	32.6	94	78	63.3
	Pride K730	3W	75	3.4	1.0	103	29.3	103	101	64.2
2200	Coop 2350	MSC	75	3.8	3.1	101	31.1	96	96	63.8
	Dekalb DK 235*	OC	75	3.1	4.8	99	31.4	115	—	—
	Funk G4017	3W	75	3.0	2.2	102	31.5	113	97	65.8
	Pickseed 2120	3W	74	4.4	3.6	98	34.9	96	90	63.0
	Pioneer 3994	3W	72	3.7	2.4	98	35.7	91	84	64.2
	Pioneer 3996	3W	75	7.8	3.2	102	33.5	96	87	61.0
	Pride K025	3W	74	6.2	2.9	100	31.8	82	—	—
2250	Cargill SX104	MSC	74	7.0	1.8	98	35.4	98	93	62.2
	Dekalb DK246	3W	76	7.9	4.6	99	34.7	100	89	60.3
	Funk G4083	SC	75	3.7	1.5	102	33.9	101	90	66.4
	Hyland HL3251	3W	74	4.3	4.6	99	37.9	91	91	66.4
	NK PX9028	3W	76	2.8	3.4	100	31.2	106	107	65.3
	Pickseed 2477*	3W	74	3.1	1.5	102	36.0	101	—	—
	Pioneer 3969	SC	74	5.3	0.9	97	35.1	114	101	63.3
	Pioneer 3979*	SC	74	2.1	6.2	96	35.1	120	109	65.7
	(UGG) MAC RL211	3W	75	5.3	0.9	101	34.1	105	99	66.0
2300***	Coop 2325	SC	78	4.3	4.6	97	33.0	105	115	64.0
	Coop 6312*	3W	76	4.5	2.8	99	32.6	109	—	—
	Pickseed 2020	SC	77	3.5	4.0	100	34.3	96	88	66.9
	Pickseed 2240	MSC	77	3.2	2.7	100	35.3	101	103	67.4
	Pickseed 2555A	MSC	77	3.9	7.9	97	36.8	102	103	64.9
	(UGG) MAC RL215	3W	78	3.4	2.4	100	36.4	97	93	67.4
2350***	Pride 1111	SC	77	6.4	2.1	94	36.1	101	101	63.9

*On recommended list for first time.

**Entries arranged alphabetically with heat unit (HU) categories.

***Insurance coverage not available. Check with Manitoba Crop Insurance for coverage on lower heat unit hybrids.

Data based on Morden, Ridgeville, Brandon test site results, 1985-87 (7 station years).

[1] SC = Single cross; 3W = three way cross. MSC = Modified single cross; OC = other cross.

[2] Mean Grain Density = 638 kg/m³ (51.1 lb/bu)

[3] Mean Grain Yield = 3.88 t/ha (61.8 bu/ac).

[4] Mean Silage DM Yield = 11.4 t/ha (4.62 t/ac).

• Corn Hybrid Descriptions — Silage Only

Heat Unit Rating	Brand and/or Hybrid Name	Hybrid Type	Days to Silk	Root Lodg. (%)	Silage Yield (% of mean)	Plant Moisture (%)
2400	Funk G4066	MSC	78	0.9	101	67.5
	NK PX414	3W	78	1.8	103	67.9
	Pioneer 3953	SC	77	0.8	105	67.1
	Pride K1115*	MSC	74	1.8	95	64.4
2450	Cargill SX111	SC	80	2.8	100	67.4
	Dekalb XL6	SC	80	1.9	98	68.3
	Jacques JX5	SC	80	2.5	108	67.5
	Hyland HL2260*	SC	79	1.1	111	66.8
	NK PX9060*	SC	79	1.6	103	66.9
	NK N1110*	3W	78	2.0	110	66.1
	Pioneer 3957	SC	78	2.0	109	67.5
2500	Coop 2610	MSC	80	5.1	105	69.0
	Dekalb T778	MSC	79	6.8	107	66.5
	First Line 1626	SC	80	1.8	106	69.5
	Funk G4018*	SC	82	4.5	133	70.1
	Funk G4102	3W	81	1.9	126	70.0
	Hyland HL2428	SC	80	2.6	125	68.3
	NK PX9902	3W	79	1.6	105	69.5

FORAGE CROPS

GRASSES

• Recommended Varieties
(listed in alphabetical order)

Bluegrass*

Bromegrass
Carlton
Magna

Creeping Red Fescue*

Crested Wheatgrass
Fairway
Nordan
Parkway

Intermediate Wheatgrass
Chief

Meadow Fescue
Ensign
Trader

Orchardgrass
Kay

Reed Canarygrass*

Russian Wild Ryegrass
Swift

Slender Wheatgrass
Revenue

Tall Wheatgrass
Orbit

Timothy
Champ — pasture type
Climax — hay type
Itasca — hay and pasture
Timfor — hay and pasture

**Insufficient data available for variety recommendation.*

LEGUMES

• Recommended Varieties
(listed in alphabetical order)

Alfalfa

Early maturing
Apica — hay type
Anchor — hay type
Angus — hay type
Blazer — hay type
Citation — hay type
Hunter — hay type
Pacer — hay type
Primal — hay type
Peak — hay type
Saranac — hay type
Thor — hay type
Trumpetor — hay type
Turbo — hay type
Vista — hay type

Medium maturing
Algonquin — hay type
Beaver — hay type
Glory — hay type
OAC Minto — hay type
Valor — hay type

Creeping rooted
Drylander — pasture type
Rambler — pasture type
Rangelander — pasture and hay type
Roamer — pasture type
Spredor II — pasture type

• Recommended Varieties — continued

Alsike Clover*

Birdsfoot Trefoil
Cree — for seed and pasture
Empire — for seed and pasture
Leo — for seed and pasture

Red Clover*

Sweet Clover
Norgold — yellow blossom, low coumarin
Polara — white blossom, low coumarin
Yukon — yellow blossom

**Insufficient data available for variety recommendation.*

Comments
Early-maturing, medium-maturing and creeping-rooted alfalfas are recommended in Manitoba. The early-maturing varieties develop quickly in the spring, and provide more and earlier regrowth than medium-maturing varieties. The medium varieties are more winter hardy than the early varieties. Creeping-rooted alfalfas are somewhat lower yielding than either the early or medium maturing types but they are the most persistent.

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